



- Inch | Metric
- 3** Type
- A** Full ball
  - B** Flat ball
  - V** Flat ball, with swivel limiting stop
  - VR** Flat ball, with swivel limiting stop, serrated

**Specification**

- Body
  - Steel
  - Property class 12.9
  - Blackened finish
- Ball
  - Steel
  - Hardened
  - Blank
- *Strength Values of Screws* → page 2127
- [RoHS compliant](#)

**On request**

- Socket head cap screws with (full) plastic ball (Type AK)

**Information**

GN 606 socket head cap screws with full ball point (type A) are used in applications where a ball point contact is required.

The flat faced moveable ball (type B) allows the clamping or supporting of non-parallel surfaces. Indentation on the workpiece is eliminated and the workpiece does not alter its position during clamping.

Socket head cap screws with safety twist ball (types V and VR) are designed so the flat faced ball cannot twist more than a maximum of 9 degrees. This allows full clamping of the flat faced ball at all times.

see also...

- *Socket Set Screws GN 605* → page 1102

How to order

**GN 606-10X32-0.625-A**

<b>1</b>	Thread d <sub>1</sub>
<b>2</b>	Thread length l <sub>1</sub>
<b>3</b>	Type

### Inch table

Dimensions in: inches - *millimeters*

d <sub>1</sub> Type A Type B	l <sub>1</sub> Nominal length			d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	l <sub>2</sub> ≈	l <sub>3</sub> ≈	l <sub>5</sub>	l <sub>6</sub>	A/F	Static load Type A / Type B
8 x 32	0.500 12.7	-	-	0.078 2.0	0.061 1.5	0.270 6.9	0.030 0.8	0.0078 0.2	0.082 2.1	0.164 4.2	0.141	787 lbf 3500 N
10 x 24	0.500 12.7	0.625 15.9	-	0.094 2.4	0.075 1.9	0.312 7.9	0.039 1.0	0.0150 0.4	0.094 2.4	0.190 4.8	0.156	1124 lbf 5000 N
10 x 32	0.500 12.7	0.625 15.9	-	0.125 3.2	0.103 2.6	0.312 7.9	0.039 1.0	0.0150 0.4	0.094 2.4	0.190 4.8	0.156	1124 lbf 5000 N
1/4 x 20	0.625 15.9	0.750 19.1	1.250 31.8	0.156 4.0	0.124 3.1	0.375 9.5	0.049 1.2	0.0236 0.6	0.118 3.0	0.250 6.4	0.188	2023 lbf 9000 N
5/16 x 18	0.875 22.2	1.250 31.8	-	0.219 5.6	0.172 4.4	0.469 11.9	0.067 1.7	0.0314 0.8	0.137 3.5	0.313 8.0	0.250	3372 lbf 15000 N
3/8 x 16	1.000 25.4	1.500 38.1	-	0.266 6.8	0.210 5.3	0.562 14.3	0.079 2.0	0.0314 0.8	0.177 4.5	0.375 9.5	0.313	5395 lbf 24000 N
1/2 x 13	2.000 50.8	-	-	0.344 8.7	0.266 6.8	0.750 19.1	0.102 2.6	0.0393 1.0	0.196 5.0	0.500 12.7	0.375	6744 lbf 30000 N

### Metric table

Dimensions in: millimeters - *inches*

d <sub>1</sub> Type A Type B	Type V Type VR	l <sub>1</sub> Nominal length					d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	l <sub>2</sub> ≈	l <sub>3</sub> ≈	l <sub>4</sub> ≈	l <sub>5</sub>	l <sub>6</sub>	A/F	Static load Type A / Type B
M 4	-	10 0.39	12 0.47	16 0.63	20 0.79	25 0.98	2.5 0.10	2 0.08	7 0.28	0.8 0.03	0.2 0.01	-	2.1 0.08	4 0.16	3	3500 N 787 lbf
M 5	-	12 0.47	16 0.63	20 0.79	25 0.98	30 1.18	3 0.12	2.5 0.10	8.5 0.33	1 0.04	0.4 0.02	-	2.4 0.09	5 0.20	4	5000 N 1124 lbf
M 6	M 6	16 0.63	20 0.79	25 0.98	30 1.18	40 1.57	4 0.16	3.2 0.13	10 0.39	1.3 0.05	0.6 0.02	0.45 0.02	3 0.12	6 0.24	5	9000 N 2023 lbf
M 8	M 8	20 0.79	30 1.18	35 1.38	40 1.57	50 1.97	5.5 0.22	4.5 0.18	13 0.51	1.8 0.07	0.8 0.03	0.5 0.02	3.5 0.14	8 0.31	6	15000 N 3372 lbf
M 10	M 10	25 0.98	30 1.18	40 1.57	50 1.97	60 2.36	7 0.28	6 0.24	16 0.63	2.3 0.09	0.8 0.03	0.6 0.02	4.5 0.18	10 0.39	8	24000 N 5395 lbf
M 12	M 12	30 1.18	50 1.97	80 3.15	-	-	8.5 0.33	7.2 0.28	18 0.71	2.8 0.11	1 0.04	0.75 0.03	5 0.20	12 0.47	10	30000 N 6744 lbf
M 16	M 16	40 1.57	60 2.36	80 3.15	-	-	12 0.47	10.7 0.42	24 0.94	4.3 0.17	1.3 0.05	1 0.04	6 0.24	16 0.63	14	73000 N 16411 lbf

3.1

3.2

3.3

3.4

3.5

3.6

3.7

3.8

3.9

3.10

